

PROPOSED NEW CLAIMS

9. A single sideband mixer circuit for high frequency signals, comprising: two double sideband mixers each being wired with identical first signals and with second signals phase-shifted by 90° relative to each other, in order to form a product signal from the first and second signals of each mixer; an adder for superimposing the product signal from each mixer to form an output signal with one sideband; and two amplifiers for generating the first signals, each amplifier being connected upstream of each mixer, the amplifiers having inputs connected to a same signal source via a forked line.

10. The single sideband mixer circuit according to claim 9, wherein the signal source is a preamplifier.

11. The single sideband mixer circuit according to claim 9, wherein each first signal is a radio frequency signal, and wherein each second signal is a local oscillator signal, and further comprising a first 90° coupler connected to a local oscillator input of the single sideband mixer circuit to generate the second signals.

12. The single sideband mixer circuit according to claim 9, wherein the signal source is a signal input of the single sideband mixer circuit.

13. The single sideband mixer circuit according to claim 12, wherein each first signal is a local oscillator signal, and wherein each second signal is an intermediate frequency signal, and further comprising a first 90° coupler connected to an intermediate frequency input of the single sideband mixer circuit to generate the second signals.

14. The single sideband mixer circuit according to claim 9, and further comprising a final amplifier for the product signal arranged between an output of each double sideband mixer and the adder.

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cont 15. The single sideband mixer circuit according to claim 9, wherein each double sideband mixer, each amplifier, and the adder are integrated on a single semiconductor substrate.

16. The single sideband mixer circuit according to claim 11, wherein the adder is a second 90° coupler.
